

San Gregorio Groundwater Basin

Groundwater Basin Number: 2-24

County: San Mateo

Surface Area: 1100 acres (2 square miles)

Basin Boundaries and Hydrology

The San Gregorio Groundwater Basin is in southern San Mateo County along the Pacific Ocean about 25 miles south of San Francisco. It is bounded by Highway 84 on the north, on the east by the Pacific Ocean, and on the west by the confluence of Bogess Creek and San Gregorio Creek. The southern boundary of the basin grades out to the upland areas. San Gregorio Creek originates at the crest of the Santa Cruz mountains and flows west through the basin to the Pacific Ocean. El Corte de Madera, Clear and Coyote creeks flow into the basin from the north before joining San Gregorio Creek and flowing west to the ocean. Narrow discontinuous strips of gently sloping marine terrace of moderate elevation form the basin.

Average annual precipitation in the basin ranges from 24 to 28 inches, increasing from west to east.

Hydrogeologic Information

Water Bearing Formations

The water bearing aquifers in the coastal area were formed in the quaternary age. The primary deposit in the San Gregorio basin is quaternary nonmarine terrace. The water bearing materials are generally medium to fine grained and consist of sands and silts. Groundwater in the basin area is derived from precipitation and surface runoff, which percolate into the nonmarine terraces.

Quaternary Nonmarine Terrace Deposits. Nonmarine terrace deposits can be found throughout the entire basin. The deposits consist of unconsolidated sands, silts, and clays with some gravels. This includes stream channel, stream terrace, and nonmarine terrace deposits. (USGS 1961).

Groundwater Level Trends

Hydrographs created from DWR well data in the basin have been stable. The depths to groundwater fluctuate annually to meet high demand periods. The depth to groundwater is generally greatest in summer months and shallowest in winter months.

Groundwater Storage

The San Gregorio groundwater basin has no underground storage basin since wells in the area generally produce only 10 to 100 gallons per minute. The use of well water is confined to domestic and stock watering purposes. (SWRCB 1984).

Groundwater Storage Capacity. No published groundwater storage capacity data for the basin was found.

Groundwater in Storage. No published groundwater in storage data for the basin was found.

Groundwater Quality

Characterization. Water quality information for the San Gregorio groundwater basin is limited. The numerous springs in the basin generally yield water of a better quality than that of the deep ground water wells (SWRCB 1984). Historical data from 4 wells in the basin indicate total dissolved solids values range from 523 mg/l to 1220 mg/l, averaging 801 mg/l.

Groundwater Budget (Type C)

Due to lack of groundwater budget data, inflows, including natural, applied, and artificial recharge and outflows including urban and agricultural extraction have not been included.

Well Production Characteristics

Well Yields: (gal/min)	Municipal/Irrigation: Range:
Production Depths: (ft)	Total depths of completed wells Domestic: Range: Average: Municipal/Irrigation: Range: 31 - 32 Average: 32 (based on 2 wells)

Active Monitoring Data

Agency	Parameter	Number of Wells /Measurement Frequency
DWR	Groundwater levels	1 wells semi annual
	Miscellaneous water quality	Unknown wells are monitored at this time
Department of Health Services	Title 22 water quality	Unknown wells are monitored at this time

and cooperators		
-----------------	--	--

Basin Management

Groundwater Management:	None identified
Water Agencies: Public Private	None

References Cited

Jennings, O.P. 1973, Geologic map of California: California Division of Mines and Geology, Geologic Map Series, San Francisco Sheet, scale 1:250,000.

California Department of Water Resources, Bulletin No. 138, Coastal San Mateo County Investigation, March 1965

California Department of Water Resources, Bulletin No. 130-71, Volume III Central Coastal Area, December 1972.

California Department of Water Resources, Bulletin No. 118-80, Ground Water Basins in California, January 1980.

US Department of Agriculture, Soil Conservation Service, Soil Survey San Mateo Area California Series 1954, No. 13; May 1961

State Water Resources Control Board, Report on San Gregorio Creek Adjudication, 1984